

WHAT IS CLAIMED IS:

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1. A solid-state image-pickup device having:  
a sensor array comprising a plurality of sensors;  
and  
a plurality of transfer registers for transferring  
signal charges from said sensors of said sensor array,  
wherein an accumulation gate for reading out signal  
charges from said sensors at the same time, accumulating  
said signal charges and allocating said signal charges to  
said transfer registers is provided between said sensor  
array and said transfer registers.
2. A solid-state image-pickup device according to  
claim 1, further comprising a read-out gate provided  
between said array of sensors and said accumulation gate.
3. A solid-state image-pickup device according to  
claim 1, wherein said accumulation gate sets a difference  
in electric potential oriented in a transfer direction.
4. A solid-state image-pickup device according to  
claim 1 wherein signal charges of said sensors are  
accumulated in said accumulation gate to be allocated in  
units of electrical charge each originated by one of said  
sensors.
5. A solid-state image-pickup device according to  
claim 1 wherein signal charges of said sensors are  
allocated to said transfer registers for each odd sensor

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and each even sensor of said sensor array.

6. A method of driving a solid-state image-pickup device having:

a sensor array comprising a plurality of sensors;

a plurality of transfer registers for transferring signal charges from said sensors of said sensor array;

and

an accumulation gate provided between said sensor array and said transfer registers,

said method comprising the steps of:

reading out signal charges from said sensors to said accumulation gate at the same time;

allocating said signal charges of said sensors from said accumulation gate to said transfer registers; and

driving said transfer registers to output said signal charges.

7. A method of driving a solid-state image-pickup device according to claim 6 whereby said transfer registers are driven at the same time.

8. A method of driving a solid-state image-pickup device according to claim 6 whereby signal charges of said sensors are allocated to said transfer registers for each odd sensor and each even sensor of said sensor array.

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